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Manoel Tenorio

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i2 TECHNOLOGIES US, INC.
ONE i2 PLACE, 11701 LUNA ROAD
DALLAS, TX 75234

EXAMINER

LIU, I JUNG

ART UNIT

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3694

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DELIVERY MODE

10/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/976,750	Applicant(s) TENORIO, MANOEL	
	Examiner MARISSA LIU	Art Unit 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/18/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11/30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, but not limited to, independent claim 11 and 21 and their dependent claims are rejected as they are describing a graph.

3. The term "substantially vertical" in claim 11 and 21 is a relative term which renders the claim indefinite. The term "substantially vertical" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purpose of the examination, the examiner interprets "substantially vertical" as "vertical".

4. The term "substantially perpendicular" in claim 11 and 21 is a relative term which renders the claim indefinite. The term "substantially vertical" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purpose of the examination, the examiner interprets "substantially perpendicular" as "perpendicular".

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien et al., U.S. Patent No.: 6,098,051 (PTO-892 reference A) in view of Official Notice (evidenced by Kameda, US Patent 5,913,197).

3. As per claim 11, Lupien et al. teaches a method for displaying strikes between bids and asks in a market over time, each strike specifying values for a plurality of strike variables, the system comprising a computer system operable to:

receive data for a plurality of strikes, the data reflecting values specified in the strikes for a plurality of strike variables (see abstract and column 4, lines 27-48, where “matches buy and sell orders” is equivalent of “strikes”);

generate a display of the received data, the display comprising:

Examiner takes Official Notice that the following three limitations of Claim 11 recite about the display of data in the form of a graph that have been well-known for decades prior to the date of invention claimed by the instant application. It would have been obvious to an ordinary person of skill in the art at the time invention was made to modify the teachings of Lupien et al. with the knowledge of a ‘graph’ to permit Lupien’s display of data results to be modified in the form of a ‘graph’ for displaying values. The motivation to combine these references would be to provide a more timely and efficient system and method for searching and displaying data information meeting the search criteria to make an informed decision by a user. The Examiner notes that the Official Notice described above is evidence by Kameda, US Patent Number: 5,913,197. Kameda

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teaches that display device 205 and at the same time graphically outputting the numerical data as a graph (Figs. 9 and 16; column 21, lines 38-44);

a plurality of polygons, each polygon representing a strike between a bid and an ask (see abstract, column 4, lines 27-48 and column 12, lines 31-37, where “matches buy and sell orders” of abstract is equivalent of “a strike between a bid and an ask”), each polygon comprising first and second of contiguous parallelograms each associated with one or more different strike variables (see Fig. 2, Figs. 6-7 and Figs. 9A-9B, and column 10, lines 53-64, where “square” is equivalent of “parallelogram”), a first and second contiguous parallelograms, a first dimension of the first parallelogram reflecting a first value specified in the represented strike for a first strike variable, a second dimension of the first parallelogram reflecting a second value specified in the represented strike for a second strike variable, a first dimension of the second parallelogram reflecting a third value specified in the represented strike for a third strike variable, and a second dimension of the second parallelogram reflecting a fourth value specified in the represented strike for a fourth strike variable (see Lupien, Fig. 2, Figs. 6-7 and Figs. 9A-9B);

a strike variable axis representing a range of values for an additional strike variable for which no value is reflected in the parallelograms, each polygon being positioned with respect to the strike variable axis according to the value specified in the represented strike for the additional strike variable represented by the strike variable axis (see Lupien, Fig. 7 and Fig. 9A); and

a time axis that is substantially perpendicular to the strike variable axis, each polygon being positioned with respect to the time axis according to a time at which the represented strike occurred (see Lupien, abstract, Fig. 2, Figs. 6-7 and Figs. 9A-9B).

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4. As per claim 12, Lupien et al. and the Official Notice teach the method of Claim 11 described above. Lupien et al. further teaches wherein a user selects the strike variables for which values are reflected in the parallelograms and selects the additional strike variable represented by the strike variable axis (see Fig. 2, Fig. 6., Fig. 9B, and column 9, lines 23-38).

5. As per claim 13, Lupien et al. teaches the method of Claim 11 described above. Lupien et al. further teaches wherein the computer system is operable to switch the additional strike variable represented by the strike variable axis with one of the strike variables for which values are reflected in the parallelograms in response to user input (see Fig. 2, Fig. 6., Fig. 9B, and column 9, lines 23-60).

6. As per claim 14, Lupien et al. and the Official Notice teach the method of Claim 11 described above. Lupien further teaches wherein the strike variables for which values are specified in the strikes comprise strike price, strike quantity, and at least one additional strike variable (see abstract).

7. As per claim 15, Lupien et al. and the Official Notice teach the method of Claim 11 described above. Lupien et al. further teaches wherein:

the strike variable axis represents a fifth strike variable and includes a range of values for the fifth strike variable (see Fig. 2, Figs. 6-7 and Figs. 9A-9B);

the time axis is substantially horizontal (see Fig. 2, Figs. 6-7 and Figs. 9A-9B); and

each polygon is positioned with respect to the strike variable axis such that the border between the two contiguous parallelograms forming the polygon is aligned with a point along the strike variable axis corresponding to the value specified in the represented offer for the fifth strike variable (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

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8. As per claim 16, Lupien et al. and the Official Notice teach the method of Claim 15 described above. Lupien et al. further teaches wherein the fifth strike variable comprises strike price (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

9. As per claim 17, Lupien et al. and the Official Notice teach the method of Claim 11 described above. Lupien et al. further teaches wherein the computer system is further operable to:

generate a filter comprising one or more strike criteria (see abstract, Fig. 2, Figs. 6-7 and Figs. 9A-9B);

generate a first window within the display, the first window comprising polygons representing strikes without regard to whether the strikes meet the strike criteria within the filter; and generate a second window within the display, the second window comprising only polygons representing strikes that meet the strike criteria within the filter (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

10. As per claim 18, Lupien et al. and the Official Notice teach the method of Claim 17 described above. Lupien et al. further teaches wherein the strike criteria comprise at least one value specified in a strike being within a particular range of values and at least one of the bid and the ask matched to form a strike being from an approved market participant (see abstract).

11. As per claim 19, Lupien et al. and the Official Notice teach the method of Claim 17 described above. Lupien et al. further teaches the strike criteria are provided by a user (see abstract).

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12. As per claim 20, Lupien et al. and the Official Notice teach the method of Claim 11 described above. Lupien et al. further teaches the market comprises an exchange-based market (see column 6, lines 21-24).

13. As per claim 21, Lupien et al. and the Official Notice teach software for displaying strikes between bids and asks in a market over time, each strike specifying values for a plurality of strike variables, the software embodied in computer readable media and when executed operable to:

receive data for a plurality of strikes, the data reflecting values specified in the strikes for a plurality of strike variables (see abstract and column 4, lines 27-48, where “matches buy and sell orders” is equivalent of “strikes”);

generate a display of the received data, the display comprising:

Examiner takes Official Notice that the following three limitations of Claim 11 recite about the display of data in the form of a graph that have been well-known for decades, and were already utilized prior to the date of invention claimed by the instant application. It would have been obvious to an ordinary person of skill in the art at the time invention was made to modify the teachings of Lupien et al. With the knowledge of a ‘graph’ to permit Lupien’s display of data results to be modified in the form of a ‘graph’ for displaying values. The motivation to combine these references would be to provide a more timely, and efficient system and method for searching and displaying data information meeting the search criteria to make an informed decision by a user. The Examiner notes that the Official Notice described above is evidence by Kameda, US Patent Number: 5,913,197. Kameda teaches that display device 205 and at the

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same time graphically outputting the numerical data as a graph (Figs. 9 and 16; column 21, lines 38-44);

a plurality of polygons, each polygon representing a strike between a bid and an ask (see Lupien, abstract, column 4, lines 27-48 and column 12, lines 31-37, where “matches buy and sell orders” of abstract is equivalent of “a strike between a bid and an ask”), each polygon comprising first and second of contiguous parallelograms each associated with one or more different strike variables (see Lupien, Fig. 2, Figs. 6-7 and Figs. 9A-9B, and column 10, lines 53-64, where “square” is equivalent of “parallelogram”), a first and second contiguous parallelograms, a first dimension of the first parallelogram reflecting a first value specified in the represented strike for a first strike variable, a second dimension of the first parallelogram reflecting a second value specified in the represented strike for a second strike variable, a first dimension of the second parallelogram reflecting a third value specified in the represented strike for a third strike variable, and a second dimension of the second parallelogram reflecting a fourth value specified in the represented strike for a fourth strike variable (see Lupien, Fig. 2, Figs. 6-7 and Figs. 9A-9B);

a strike variable axis representing a range of values for an additional strike variable for which no value is reflected in the parallelograms, each polygon being positioned with respect to the strike variable axis according to the value specified in the represented strike for the additional strike variable represented by the strike variable axis (see Lupien, Fig. 7 and Fig. 9A); and

a time axis that is substantially perpendicular to the strike variable axis, each polygon being positioned with respect to the time axis according to a time at which the represented strike occurred (see Lupien, abstract, Fig. 2, Figs. 6-7 and Figs. 9A-9B).

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14. As per claim 22, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien et al. further teaches wherein a user selects the strike variables for which values are reflected in the parallelograms and selects the additional strike variable represented by the strike variable axis (see Fig. 2, Fig. 6., Fig. 9B, and column 9, lines 23-38).

15. As per claim 23, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien et al. further teaches wherein the computer system is operable to switch the additional strike variable represented by the strike variable axis with one of the strike variables for which values are reflected in the parallelograms in response to user input (see Fig. 2, Fig. 6., Fig. 9B, and column 9, lines 23-60).

16. As per claim 24, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien further teaches wherein the strike variables for which values are specified in the strikes comprise strike price, strike quantity, and at least one additional strike variable (see abstract).

17. As per claim 25, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien et al. further teaches wherein:

the strike variable axis represents a fifth strike variable and includes a range of values for the fifth strike variable (see Fig. 2, Figs. 6-7 and Figs. 9A-9B);

the time axis is substantially horizontal (see Fig. 2, Figs. 6-7 and Figs. 9A-9B); and

each polygon is positioned with respect to the strike variable axis such that the border between the two contiguous parallelograms forming the polygon is aligned with a point along the strike variable axis corresponding to the value specified in the represented offer for the fifth strike variable (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

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18. As per claim 26, Lupien et al. and Official Notice teach the software of Claim 25 described above. Lupien et al. further teaches wherein the fifth strike variable comprises strike price (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

19. As per claim 27, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien et al. further teaches wherein the computer system is further operable to:

generate a filter comprising one or more strike criteria (see abstract, Fig. 2, Figs. 6-7 and Figs. 9A-9B);

generate a first window within the display, the first window comprising polygons representing strikes without regard to whether the strikes meet the strike criteria within the filter; and generate a second window within the display, the second window comprising only polygons representing strikes that meet the strike criteria within the filter (see Fig. 2, Figs. 6-7 and Figs. 9A-9B).

20. As per claim 28, Lupien et al. and Official Notice teach the software of Claim 27 described above. Lupien et al. further teaches wherein the strike criteria comprise at least one value specified in a strike being within a particular range of values and at least one of the bid and the ask matched to form a strike being from an approved market participant (see abstract).

21. As per claim 29, Lupien et al. and Official Notice teach the software of Claim 27 described above. Lupien et al. further teaches the strike criteria are provided by a user (see abstract).

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22. As per claim 30, Lupien et al. and Official Notice teach the software of Claim 21 described above. Lupien et al. further teaches the market comprises an exchange-based market (see column 6, lines 21-24).

Response to Arguments

23. Applicant's arguments filed 6/18/2008 have been fully considered but they are not persuasive.

As to claim 1, Applicant argues that Lupien et al. does not teach the limitation of “a method for displaying strikes between bids and asks in a market over time, each strike specifying values for a plurality of strike variables”. In response to applicant's arguments, the recitation “a method for displaying strikes between bids and asks in a market over time, each strike specifying values for a plurality of strike variables” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant further argues that Lupien et al. fails to disclose the limitations regarding “receiving data for a plurality of strikes”. The Examiner disagrees. Lupien et al. discloses “matches buy and sell orders based upon a satisfaction and quantity profile is disclosed... orders are entered in the form of a satisfaction density profile that represents a degree of satisfaction to trade a particular instrument at various (price, quantity) combination, average price and size,

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requiring that priority be given to orders exhibiting the best price (abstract) and “all items that can be traded, such as, for example, futures, derivative, options... The terms “buy and “sell” include where appropriate, bid and offer, etc. (column 6, lines 26-38). Lupien also discloses receiving data for a plurality of strikes in Figs. 2, 4, 6-7 and 9. Therefore, Lupien discloses the claimed invention.

Applicant further argues that Lupien fails to disclose the limitations regarding “a plurality of polygons, each polygon representing a strike between a bid and an ask, each polygon comprising first and second of contiguous parallelograms each associated with one or more different strike variables, a first and second contiguous parallelograms, a first dimension of the first parallelogram reflecting a first value specified in the represented strike for a first strike variable, a second dimension of the first parallelogram reflecting a second value specified in the represented strike for a second strike variable, a first dimension of the second parallelogram reflecting a third value specified in the represented strike for a third strike variable, and a second dimension of the second parallelogram reflecting a fourth value specified in the represented strike for a fourth strike variable . The Examiner disagrees. Lupien et al. discloses “all items that can be traded, such as, for example, futures, derivative, options... The terms “buy and “sell” include where appropriate, bid and offer, etc. (column 6, lines 26-38). Lupien also discloses “one dimension being price and the second dimension being size of transaction, that as a whole characterizes the trader's degree of satisfaction for a transaction at each (price, size) coordinate In the representative embodiment, each (price, quantity) coordinate is represented by a colored square (e.g., 80), with the color of the square (Figs. 2 and 6-9; column 4, lines 8-45; column 10, line 48-column 11, line 7). The examiner notes that square is a parallelogram. The dictionary

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defines parallelogram as "a 4-sided plan figure with opposite sides equal and parallel. Square is a 4-sided plan figure with opposite sides equal and parallel. Therefore, Lupien et al. discloses the claimed invention.

5. The claim is indefinite because the term "substantially vertical" is a relative term. The term "substantially vertical" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

6. The claim is indefinite because the term "substantially perpendicular". The term "substantially vertical" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARISSA LIU whose telephone number is (571)270-1370. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L./

Examiner, Art Unit 3694

/James P Trammell/

Supervisory Patent Examiner, Art Unit 3694